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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,553	11/27/2001	Michael W. Perryman	1248-38	1087

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EXAMINER

VARMA, SNEH K

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 02/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,553

Applicant(s)

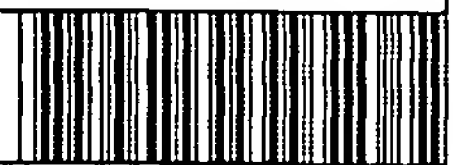
Perryman et al.

Examiner

First Last

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-52 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) None is/are allowed.
- 6) ☒ Claim(s) 28-32 is/are rejected.
- 7) ☒ Claim(s) None is/are objected to.
- 8) ☒ Claims 33-52 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 20) ☐ Other:

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DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 28-32, drawn to a method, classified in class 473, subclass 409.
- II. Claims 33-52, drawn to a golf club shaft, classified in class 473, subclass 319.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different products or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the method of making could be used to make other shafts such as fishing poles, ski poles, electric poles, etc., and the golf club shaft as claimed could be made by other steps of filament winding and sheet rolling to achieve the desired structure and weight of the shaft.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

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5. During a telephone conversation with Mr. Charles J. Meyer, the Applicant's Attorney, on February 1, 2002 a provisional election was made without traverse to prosecute the invention of Group I, claims 28-32. Affirmation of this election must be made by the Applicant in replying to this Office action. Claims 33-52 are withdrawn from further consideration by the examiner, under 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Information Disclosure Statement

7. The information disclosure statement filed on November 27, 2001 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because a copy of the references is not provided by the Applicant. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

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Claim Rejections - 35 U.S.C. § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 28-32 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. An election of the step of either "filament winding" or "sheet rolling" around a mandrel to form a shaft core has not been disclosed. In addition, the sequence of the step of placing a "scrim layer around" either before or after the removal of the mandril, as recited in Claim 28, is not disclosed. This disclosure is critical and essential to the practice of the invention, but not included in the claims and not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The best mode steps contemplated by the inventor have not been disclosed. The Applicant has described in the specification an "hybrid composite" structure illustrated in Figure 4. However, the steps of manufacturing this composite structure are not clear. To enable one of ordinary skill in the art to utilize the invention, the disclosure of the steps as well as sequence of the steps recited above is required. ✓

10. Claims 28-32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Applicant has disclosed the following embodiments: ○

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Embodiment 1: as shown in Figures 1-2E

Embodiment 2: as shown in Figures 3A and 3B

Embodiment 3: as shown in Figure 4

Embodiment 4: as shown in Figures 5 and 6

Embodiment 5: as shown in Figures 7-9

Embodiment 6: as shown in Figure 10

Embodiment 7: as shown in Figures 11A-11D

Embodiments 3 and 4 are contradictory. There is inadequate support in the description to establish if the invention requires the initial step of "filament -winding" or sheet-rolling." A correction and clarification are required. No new matter should be entered.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 28-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

The recitation of "Filament winding or sheet rolling a plurality of fibers" in Claim 1 makes the structure indefinite. It is not clear which one of these steps is performed first. The mechanical

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properties of the golf club shaft would be dependent on the choice of material for the filaments and sheet-fibers as well as the sequence of steps in the process.

It is also not clear if the Applicant claims the use of "filament wound" or "sheet-rolled" plies or both in "one or more" layers to create a "hybrid" structure. ✓

The recitation of "an amount of weight" in Claims 29 and 30, is indefinite. ✓

Claim Rejections - 35 U.S.C. § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh '892 (McIntosh) in view of Branen et al. '035 (Branen) and Ebneith et al (Ebneith).

McIntosh discloses a method of manufacturing a composite golf club shaft (Figure 3), comprising the steps of sheet rolling a plurality of fiber- reinforced graphite plies around a mandrel to form a shaft core 30 (Figures 1-3; Column 6, lines 10-15 ; Column 7, lines 17-24; Column 8, lines 7-22); and placing a scrim layer around at least one outer ply (Column 5, lines 13-16). McIntosh further discloses the use of at least one sheet-rolled ply having metal-coated fibers (Abstract; Column 2, lines 40-47 and 58-68). However, McIntosh fails to disclose the use of a filament wound ply using metal-coated fibers. Branen teaches the use of a filament wound ply and filament fiber tape (Column 2, lines 26-27; and 35-55). Ebneith teaches the use of

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nickel-coated fibers and sheets (Abstract; Column 1, lines 43-45; Column 2, lines 11-13; Column 3, lines 10-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Branen and Ebneth in the McIntosh device to improve the structural properties of the golf club shaft. Such is suggested by McIntosh (Column 2, lines 1-23).

○
Branen

36-32 Kusumoto

15. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references applied in the rejection of Claim 28 and further in view of Hoffmeyer '753 (Hoffmeyer).

The McIntosh device as modified by Branen and Ebneth discloses the invention as recited above. However, the modified McIntosh device fails to disclose that winding of metal-coated fiber is concentrated in a predetermined location. Hoffmeyer teaches the use of non-uniformly concentrated windings of predetermined weight in a predetermined location 4, (Figure 1; Column 2, lines 5-10; Column 3, lines 53-60) on the shaft.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Hoffmeyer in the modified McIntosh device to improve the weight distribution and the "feel" of the shaft.

16. Claims 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied in Claim 30 above, above, and further in view of Chen '457 (Chen).

The modified McIntosh device discloses the invention as recited above. However, the modified McIntosh device fails to disclose that winding of metal-coated fiber in different

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locations. Chen teaches the use of a golf shaft 10 (Figure 1; Column 5, lines 14-25) with concentrated windings of fibers near hosel portion 10c and near the grip portion 10a.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Chen in the modified McIntosh device to selectively stiffen the shaft to allow the shaft to flex at pre-selected points along the shaft. .

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Varma whose telephone number is (703) 308-8335. The examiner can normally be reached on Monday to Friday from 8:00 A.M. - 4:30 P.M.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Paul Sewell, can be reached on (703) 308- 2126.

The Official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9302 and the fax phone number After Final Office Action is (703) 872-9303. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

February 6, 2002

Sneh Varma, Patent Examiner

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Steven Wong
Primary Examiner